

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A linear sensor comprising electrically conductive textile fibres and electrically insulating textile fibres, said sensor comprising:

at least two conductive elements having electrically conductive textile fibres and electrically insulating textile fibres spaced to separate said two electrically conductive elements when no pressure is applied to said sensor and to allow electrical conduction between said two conductive elements under the application of pressure, wherein said at least two conductive elements comprise

a first conductive element having electrically conductive textile fibres extending along at least a portion of the length of said sensor; and

a second conductive element having electrically conductive textile fibres extending along at least said portion of the length of said sensor,

and said sensor further comprises a third conductive element extending along at least said portion of the length of said sensor,

wherein said third conductive element is electrically insulated from said first and second conductive elements over said portion of the length of said sensor, and said third conductive element is electrically connected at one end to only one of said first conductive element and said second conductive element.

2. (original) A sensor according to claim 1 in which a first one of said conductive elements is surrounded by a second one of said conductive elements.

3. (original) A sensor according to claim 2 in which said second conductive element is surrounded by a sheath.

4. (previously presented) A sensor according to claim 1 comprising a woven, knitted or braided textile structure.

5. (previously presented) A sensor according to claim 1 in which said insulating textile fibres are woven, knitted or braided.

6. (previously presented) A sensor according to claim 1, wherein one of said conductive elements has a woven, knitted or braided structure.

7. (previously presented) A sensor according to claim 1, wherein the conductive fibres of one of said conductive elements and insulating fibres are woven, knitted or braided together.

8. (previously presented) A sensor according to claim 1 in which a first one of said conductive elements is surrounded by a second one of said conductive elements having conductive fibres forming a woven, knitted or braided structure.

9. (previously presented) A sensor according to claim 1 configured such that an electrical potential is established across one of said conductive elements and a potential is measured at a different one of said conductive elements.

10. (original) A sensor according to claim 9, wherein a data item representing a potential measurement is periodically sent to a data processing device.

11. (previously presented) A sensor according to claim 1 further comprising elastic fibres and wherein at least one conductive element comprises a substantially elastic structure.

12 – 13. (cancelled)

14. (currently amended) A sensor according to claim 1 1[[13]], wherein said third conductive element and said first conductive element or said second conductive element are electrically connected at a first end of said sensor, and said sensor has electrical terminals for applying electrical potentials and/or measuring an electrical potential located only at the second end of said sensor.

15. (currently amended) A sensor according to claim 1 1[[13]], wherein said third conductive element is located within a solid insulating sleeve.

16. (currently amended) A sensor according to claim 1 [[13]], wherein said insulating sleeve is surrounded by electrically conductive textile fibres of said first conducting element.

17 – 19. (cancelled)

20. (previously presented) A sensor according to claim 15 in which a first one of said conductive elements is surrounded by a second one of said conductive elements having conductive fibres forming a woven, knitted or braided structure.